Fostering Full Implementation of Evidence-Based Practice

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Evidence-based practice (EBP) is a widely endorsed concept, but many occupational therapy practitioners would like to be more informed and supported in its full implementation. They need information on the evolving definitions and concepts of EBP, encouragement to develop and adopt EBP models that link to occupational therapy's professional values, and methods that translate evidence into answers for clinical questions. This column discusses these needs and makes recommendations to the American Occupational Therapy Association for addressing them.

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Occupational therapy practitioners support the concept of evidence-based practice (EBP), and the American Occupational Therapy Association (AOTA; 2007) *Centennial Vision* describes the goal of being an evidence-based profession. Beyond the profession of occupational therapy, federal legislation such as the No Child Left Behind Act of 2001 (Pub. L. 107–110) and numerous health care professions encourage the use of EBP by all practitioners (Simpson, 2005). Unfortunately, research has indicated that practitioners do not always have the information and support needed to fully implement EBP (Upton, Stephens, Williams, & Scurlock-Evans, 2014).

Because multiple EBP definitions, clarifications, and debates are evolving rapidly in the literature, anyone except the most focused practitioner would find it difficult to stay up to date on EBP. Practitioners from many countries have indicated that they have limited time to search for research evidence (Cahill, Egan, Wallingford, Huber-Lee, & Dess-McGuire, 2015; Graham, Robertson, & Anderson, 2013; Lyons, Brown, Tseng, Casey, & McDonald, 2011; Salls, Dolhi, Silverman, & Hansen, 2009; Stronge & Cahill, 2012; Upton et al., 2014); therefore, finding time to search for the latest information about EBP would be even more difficult. Other barriers such as confidence in analyzing the statistics or rigor of research and in searching databases (Cahill et al., 2015; Döpp, Steultjens, & Radel, 2012; Lyons et al., 2011) might also limit the ability of practitioners to follow ongoing research on and discussion about EBP.

Occupational therapy practitioners want to be effective and use evidence in practice, but they are likely to be unsure how to actually implement EBP. Given

Note. Each issue of the 2017 volume of the *American Journal of Occupational Therapy* features a special Centennial Topics section containing several articles related to a specific theme; for this issue, the theme is occupational therapy history. The goal is to help occupational therapy professionals take stock of how far the profession has come and spark interest in the many exciting paths for the future. For more information, see the editorial in the January/February issue, https://doi.org/10.1054/ajot.2017.711004.

the multiple topics being debated in the literature (i.e., how EBP relates to theory, how professional experience should be incorporated into practice), it would be easy to be confused or uncertain about how to proceed. Resources to support practitioners in full implementation of EBP are limited in scope and accessibility. Even though EBP resources for finding and appraising empirical research and critically appraised topics are readily available, a professionwide emphasis to strengthen EBP is needed. This emphasis should focus on educating practitioners on the evolution of EBP, developing and adopting occupational therapy models of EBP, and building links among researchers and occupational therapy practitioners. In other words, all practitioners need to be fully supported in all aspects of EBP.

Practitioners would benefit if the AOTA formally supported and provided assistance for full implementation of EBP within the profession. This formalization of support and assistance would move practitioners forward in three ways:

1. They would become more aware of the current EBP concepts and terms and how they are evolving within the international discussion of EBP.
2. They would have resources that support the development and implementation of specific EBP models.
3. They would have resources that bring researchers and practitioners together for knowledge translation and communities of practice.

Full support of EBP could help reach practitioners' goal of being evidence based and help the profession achieve the *Centennial Vision* (AOTA, 2007). The aim of this column is to strongly encourage this move by AOTA and suggest possible actions to achieve this goal.

Background

The concept of evidence-based medicine (EBM) was first discussed by researchers and doctors at McMaster University in the early 1980s and 1990s (Claridge & Fabian, 2005). Later, it was more formally defined by Sackett, Rosenberg, Gray, Haynes, and Richardson (1996) when they wrote that EBM "is a bottom-up approach that integrates the best external evidence with individual clinical expertise and patient choice" (p. 72). Since that time, the term has evolved and been applied to other disciplines and professions as *evidence-based practice, evidence-based decision making, evidence-based policy,* and *evidence-based education.* Some occupational therapists have suggested the use of the terms *evidence-informed practice* and *evidence-supported practice* (Hinojosa, 2013; Tomlin & Dougherty, 2014). Regardless of which term is used, the core of Sackett et al.'s definition of EBM implies that professionals should meld the most rigorous empirical outcomes available with professional expertise and client preferences to answer important clinical questions. In addition, over time, the concept of EBP has been expanded and clarified.

Concerns have been expressed about whether EBP truly represents the practice of occupational therapy (Copley, Turpin, & King, 2010; Tomlin & Dougherty, 2014). For example, EBP may be a challenge for occupational therapy given its limited empirical research to support practice and its core value of individualized, client-centered care (Reagon, Bellin, & Boniface, 2008). Do most U.S. occupational therapy practitioners know about these concerns? Do they know the implications of these issues? Do they know what actions are needed to move EBP forward, thus allowing the profession to fulfill the *Centennial Vision* (AOTA, 2007)? I posit that the current answer to these questions is no. Full implementation of EBP cannot be done by practitioners alone; therefore, organizational support and leadership from AOTA to alter this situation is needed.

What Is Needed for Full Evidence-Based Practice?

Practitioners need to be regularly informed about the evolution of ideas related to EBP. For example, an expanded definition of the term *evidence* is emerging. Historically, evidence has referred to empirical research with a heavy emphasis on rigorous quantitative studies. Some authors today view evidence in a broader light that includes both internal and external evidence, or foreground and background evidence (Thomas & Law, 2013; Tomlin & Dougherty, 2014). External evidence includes empirical research but is not limited to high-quality quantitative studies: Lower quality studies, qualitative studies, and professional opinion can also contribute to answering questions. Internal evidence includes the clinical outcomes that a professional has observed, collected, and reflected upon over time; contextual challenges for a particular client; and direct input from the client. In the emerging definition of EBP, each type of evidence would be considered and weighed differently when answering a clinical question depending on whether the question related to an individual client, a protocol, or a policy.

Practitioners need information on the variety of published EBP models. Some models are expansions of Sackett et al.'s (1996) concept of EBM (Dollaghan, 2007; Tomlin & Dougherty, 2014; Tonelli, 2006), which include some or all of the broader perspectives on what is useful evidence. Others add new elements to what constitutes EBP, such as the practitioner's values and preferences (Gilgun, 2006), facility resources (Bannigan & Moores, 2009), and the importance of context (Dobrow, Goel, & Upshur, 2004). Still other models provide an evidence-based

process of thinking and include ideas such as reflective practice (Bannigan & Moores, 2009), the importance of tacit knowledge or accumulated wisdom (Dawes et al., 2005; Pearson, Wiechula, Court, & Lockwood, 2005), and the evaluation of the outcomes of practitioner decisions (Baker & McLeod, 2011; Evidence-Based Behavioral Practice, 2007). Expanding practitioner awareness of the various models and encouraging implementation of a model (either individually or institutionally) is an important step toward full EBP.

EBP models developed by other disciplines can be informational for occupational therapy; however, occupational therapy practitioners should be encouraged to develop and publish models that reflect the core values and ideas central to occupational therapy practice, such as evaluating outcomes, using client-centered care, and applying clinical reasoning (AOTA, 2014). In recognizing this need for occupational therapy–specific models, Reagon et al. (2008) have suggested a framework for "client-centred evidence-based practice for [occupational therapy]" (p. 435) that focuses on the client–practitioner relationship. Additional occupational therapy–specific models that focus on other core occupational therapy components are needed. By encouraging the development and dissemination of occupational therapy–specific models, the profession will create opportunities for practitioners and institutions to be able to choose an EBP model that best suits their reasoning style, setting, and population.

Finally, full EBP would include mechanisms that support building and analyzing evidence in a two-prong approach. The first is to link researchers with practitioners for knowledge translation to develop and conduct research that would directly inform a specific occupational therapy practice (Corcoran, 2006; Cramm, White, & Krupa, 2013; Metzler & Metz, 2010). The second is to link practitioners to each other in small groups to share reflections, insights, and research evidence on a common population or setting. These small groups are called *communities of practice* (Cramm et al., 2013; Lencucha, Kothari, & Rouse, 2007). Although journal clubs have begun the process of connecting practitioners in sharing and discussing empirical research, communities of practice would go beyond journal clubs by discussing the full range of issues related to EBP.

Recommended Steps to Full Evidence-Based Practice

An important first step to full implementation of EBP is to formally acknowledge its support. I propose that the AOTA form a committee consisting of researchers, educators, clinicians, students, and policymakers to define the profession's position on EBP in a formal document such as an EBP position paper or policy statement. The information in this formal document would assist all practitioners in understanding the profession's emphasis on EBP, discuss how the profession defines EBP terms, and describe the relationship between EBP and occupational therapy's professional core values and ideas. This document would need to be frequently updated because EBP models, definitions, and practices will surely evolve over time. To continually keep practitioners informed about changes to the formal document, changes to EBP, and new resources that support EBP, regular features or continuing education articles on EBP should be published in *OT Practice*. Interactive sessions could also be offered at national and state conferences.

The second step, expanding on the formalization of support, involves AOTA developing a virtual repository where different EBP models (general and specific to occupational therapy) could be presented in detail and the pros and cons of each could be discussed. Practitioners would be encouraged to adopt a model individually, as a department, or as an institution that represents their reasoning and implementation of EBP. Providing resources to help practitioners make system changes at their workplaces for adopting an EBP model would be another beneficial step. Examples might include the development of EBP mentors and EBP champions in the workplace. Highlighting exemplars of individual practitioners, institutions, or university programs that practice EBP as a core value would give practitioners examples to follow. By adopting these actions, AOTA's efforts will, at the very least, encourage informed discussion among practitioners as different models are studied and debated.

The third step is to provide mechanisms that facilitate linkages for knowledge translation or communities of practice. Some mechanisms should bring researchers and practitioners together to design and implement research that provides practical, useable information for the clinic (Law & MacDermid, 2014; Lin, Murphy, & Robinson, 2010). Suggestions include developing online communities that connect researchers with practitioners who seek answers to similar clinical questions, supporting the development of research positions in medical facilities or public schools (Forsyth, Summerfield-Mann, & Kielhofner, 2005), and offering continuing education programs that bring researchers and practitioners together such as an EBP specialty conference or a series of courses at the AOTA Annual Conference & Expo. Other mechanisms should provide materials that support the building of communities of practice in a single setting or geographical area. Suggestions include toolkits on how to

develop these groups, case studies to use as group-building activities, and interactive training materials to help practitioners infuse the full spectrum of evidence into their clinical decision making. Some of the specific challenges practitioners face that could be tackled by these groups are how to make a clinical decision when the empirical evidence is absent or weak, talk to clients about the evidence, and overcome setting-based barriers that might impede the implementation of well-researched interventions. Finally, a mechanism for verifying practitioners' EBP abilities could include a board or specialty certification in EBP.

The last step toward full EBP is to develop an agenda for research that examines outcomes that result from the implementation of specific EBP models (Lin et al., 2010). Current EBP research focuses on practitioners' behaviors (Cahill et al., 2015). There is limited research that examines outcomes that result from the implementation of a full EBP model (Tomlin & Dougherty, 2014). Sirkka, Larsson-Lund, and Zingmark (2014) have begun this process by qualitatively examining practitioners who tried to improve EBP by using the Occupational Therapy Intervention Process Model. To fully explore EBP, occupational therapy needs a research agenda that encourages researchers to examine all the benefits to clients, facilities, and practitioners.

Conclusion

This article proposes a practical path for the field of occupational therapy to better understand and fully implement EBP by formalizing and broadening AOTA's support of EBP. Methods for moving forward on this path include developing a position paper or EBP policy statement, developing a virtual repository of EBP models, publishing articles and offering conference programs on EBP, supporting the expansion of knowledge translation and communities of practice, and developing a research agenda that examines the outcomes of occupational therapy EBP. AOTA is strongly encouraged to adopt these ideas so the vision of becoming an evidence-based profession can be realized. ▲

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